(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 10 February 2005 (10.02.2005)

PCT

(10) International Publication Number WO 2005/011654 A2

(51) International Patent Classification⁷: A61K 31/00

(21) International Application Number:

PCT/US2004/024542

(22) International Filing Date: 29 July 2004 (29.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

 60/491,140
 29 July 2003 (29.07.2003)
 US

 60/491,080
 30 July 2003 (30.07.2003)
 US

 60/491,116
 30 July 2003 (30.07.2003)
 US

 60/491,322
 30 July 2003 (30.07.2003)
 US

 60/491,141
 30 July 2003 (30.07.2003)
 US

(71) Applicant (for all designated States except US): XENON PHARMACEUTICALS INC. [CA/CA]; 3650 Gilmore Way, Burnaby, British Columbia V5G 4W8 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ABREO, Melwyn [US/US]; 3373 Armagosa Way, Jamul, CA 91932 (US). HARVEY, Daniel, F. [US/US]; 6254 Lakewood Street, San Diego, CA 92122 (US). KONDRATENKO, Mikhail, A., [RU/US]; 12820 Via Nieve #73, San Diego, CA 92130 (US). LI, Wenbao [CN/US]; 11674 Castile Way, San Diego, CA 92128 (US). KAMBOJ, Rajender [CA/CA]; 5809 Sperling Avenue, Burnaby, British Columbia V5E 2T6 (CA). KODUMURU, Vishnumurthy [CA/CA]; 211-6577 Royal Oak Avenue, Burnaby, British Columbia V5H 3P3 (CA). WINTHER, Michael, D. [CA/CA]; 1935 West 4th Avenue, Vancouver, British Columbia V6J 2K1 (CA). GSCHWEND, Heinz, W. [US/US]; 161 Meadowcroft Way, Santa Rosa, CA 95403 (US). CHAKKA, Nagasree [CA/CA]; 211-6577 Royal Oak Avenue, Burnaby, British Columbia V5H 3P3 (CA). LIU, Shifeng [CA/CA]; 15-2615 Fortress Drive, Port Coquitlam, British Columbia V3C 6E8 (CA). **SVIRIDOV**, Serguel [CA/CA]; 1904-5885 Olive Avenue, Burnaby, British Columbia V5H 4N8 (CA). SUN, Shaoyi [CA/CA]; #407-1029 East Broadway, Vancouver, British Columbia V5T 1Y8 (CA).

- (74) Agents: ROTH, Carol, J. et al.; Seed Intellectual Property Law Group PLLC, Suite 6300, 701 Fifth Avenue, Seattle, WA 98104-7092 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

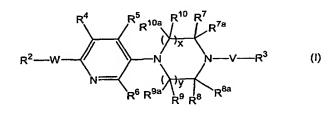
- of inventorship (Rule 4.17(iv)) for US only

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PYRIDYL DERIVATIVES AND THEIR USE AS THERAPEUTIC AGENTS



(57) Abstract: Methods of treating an SCD-mediated disease or condition in a mammal, preferably a human, are disclosed, wherein the methods comprise administering to a mammal in need thereof a compound of formula (I): wherein W, V, x, y, R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁷a, R⁸, R⁸a, R⁹, R^{9a}, R¹⁰ and R^{10a} are defined herein. Pharmaceutical compositions comprising the compounds of formula (I) are also disclosed.